

# Mineral Industry Surveys

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#### **ALUMINUM IN DECEMBER 2006**

Domestic primary aluminum production in December was 195,682 metric tons (t), according to the U.S. Geological Survey. The average daily production rate was 6,312 t, 1% higher than that of the previous month but 6% below the rate for December 2005. Total aluminum recovered from scrap in December 2006 was 241,000 t, 2% lower than that of November 2006 but 7% higher than that in December 2005. In December 2006, 152,000 t of aluminum was recovered from new scrap, which was about 7% lower than in November but 6% higher than in December 2005. Aluminum recovered from old scrap totaled 89,000 t in December, which was 6% higher than in the previous month and 9% higher than in December 2005.

The monthly average U.S. market price of primary aluminum ingot increased in December to \$1.302 per pound from \$1.272

per pound in November, according to Platts Metals Week. The American Metal Market buying price range for aluminum used beverage cans (UBCs) remained at 84-86 cents per pound throughout December.

#### **Update**

The monthly average U.S. market price of primary aluminum ingot in January decreased to \$1.272 per pound. The American Metal Market buying price range for aluminum UBCs increased to 87-89 cents per pound on January 2, then increased to 89-91 cents per pound on January 16. The UBC price range dropped to 88-90 cents per pound on January 30 and remained at that range for the rest of the month.

 $\label{eq:table 1} \text{COMPONENTS OF ALUMINUM SUPPLY}^1$ 

## (Thousand metric tons)

					Impor	ts for consum	for consumption		
	Primary	Seco	ndary recover	ry <sup>2</sup>	Metals and alloys,	Plates, sheets, bars,		Total new	Total stocks, end of
Period	production	New	Old	Total	crude	etc.	Total	supply <sup>3</sup>	period <sup>4</sup>
2005	2,481	1,930	1,060	2,990	3,660	1,190	4,850	10,300	1,430
2005:	=								
December	208	143	82	225	299	89	388	821	1,430
2006:									
January	197	168	89	257	348	97	445	898	1,470
February	179	161	84	244	247	87	333	757	1,480
March	198	168	92	259	289	104	393	850	1,460
April	190	160	88	248	353	103	456	894	1,480
May	197	161	89	250	318	106	424	870	1,430
June	189	162	92	254	298	109	407	849	1,430
July	192	165	92	256	249	111	360	808	1,450
August	185	166	109	275	315	111	426	887	1,430
September	183	159	87	246	289	102	391	819	1,480
October	190	161	79	240	259	100	359	789	1,410
November	188	163 <sup>r</sup>	84 <sup>r</sup>	247 <sup>r</sup>	233	99	332	766	1,400
December	196	152	89	241	NA	NA	NA	NA	NA
January-December	2,284	1,950	1,070	3,020	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>r</sup>Revised. NA Not available.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

<sup>&</sup>lt;sup>3</sup>Primary production, secondary recovery, and imports for consumption.

<sup>&</sup>lt;sup>4</sup>Inventory levels reflect total for both U.S. and Canadian producers; data from the Aluminum Association Inc.

 ${\it TABLE~2}$  ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP  $^1$ 

#### (Thousand metric tons)

			Inte	grated	Indep	endent						
	Secondary aluminum smelters companies		n	mill		Other						
			companies		fabricators		Foundries		consumers		Total	
	Con-		Con-		Con-		Con-		Con-		Con-	
	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal
Period	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery
2005	1,700	1,310	815	725	926	867	90	80	10	9	3,540	2,990
2005:	_											
December	129	93	63	56	74	69	8	7	(2)	(2)	274	225
2006:	_											
January	135	100	76	68	87	81	8	7	(2)	(2)	306	257
February	131	96	78	70	76	71	8	7	(2)	(2)	293	244
March	141	103	81	73	82	77	8	7	(2)	(2)	312	259
April	135	97	80	72	77	72	8	7	(2)	(2)	300	248
May	138	100	65	58	90	84	8	7	(2)	(2)	301	250
June	138	100	74	66	86	81	8	7	(2)	(2)	307	254
July	136	99	76	68	88	82	8	7	(2)	(2)	308	256
August	167	126	71	64	83	78	8	7	(2)	(2)	330	275
September	135	98 <sup>r</sup>	77 <sup>r</sup>	69	80	75	8	7	(2)	(2)	300 r	250 <sup>r</sup>
October	130	94	69	62	83 <sup>r</sup>	78 <sup>r</sup>	8	7	(2)	(2)	289	241 <sup>r</sup>
November <sup>r</sup>	139	103	76	61	81	76	8	7	(2)	(2)	304	247
December	134	98	82	66	76	71	7	7	(2)	(2)	299	241
January-December	1,660	1,210	905	797	989	926	95	84	6	6	3,650	3,020

rRevised.

TABLE 3 CONSUMPTION OF AND RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP IN DECEMBER  $2006^1$ 

#### (Metric tons)

			Calculated			
	Consu	mption	metallic	recovery		
	Tabulated	Tabulated Estimated		Estimated		
	reports	full coverage	reports	full coverage		
Secondary smelters	112,000	134,000	81,500	97,800		
Integrated aluminum companies	81,500	81,500	66,100	66,100		
Independent mill fabricators	63,000	75,600	58,900	70,600		
Foundries	6,230	7,480	5,450	6,530		
Other consumers	323	388	323	388		
Total	263,000	299,000	212,000	241,000		

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

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<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

 ${\it TABLE~4} \\ {\it PURCHASED~AND~TOLL-TREATED~ALUMINUM-BASE~SCRAP~AND~SWEATED~PIG~IN~DECEMBER~2006}^1 \\$ 

		Decei	mber		January-D	ecember <sup>2</sup>
	Stocks,	Net	Melted or	Stocks,	Net	Melted or
	opening	receipts3	consumed	closing	receipts3	consumed
New scrap:						
Extrusion	19,800 <sup>r</sup>	50,500	52,600	17,700	887,000	889,000
Can stock clippings	1,470 <sup>r</sup>	34,800	35,100	1,130	256,000	258,000
Other wrought sheet/clippings	4,120 <sup>r</sup>	21,800	21,800	4,140	260,000	260,000
Casting	2,070	8,150	7,580	2,640	97,300	96,700
Borings and turnings	2,510 <sup>r</sup>	11,300	10,900	2,910	133,000	134,000
Dross and skimmings	3,440	34,200	34,300	3,380	415,000	415,000
Total new scrap	33,400	161,000	162,000	31,900	2,050,000	2,050,000
Old scrap:						
Used castings	3,360 <sup>r</sup>	14,200	14,000	3,580	182,000	182,000
Used Extrusion	405 <sup>r</sup>	2,670	2,680	399	16,800	16,800
Used cans (shredded, loose, baled)	4,080 <sup>r</sup>	53,400	53,700	3,760	687,000	684,000
Other wrought products	2,340	18,100	18,100	2,340	85,900	85,900
Fragmentized shredder (auto shredder)	2,120 <sup>r</sup>	11,700	11,300	2,510	140,000	160,000
Total old scrap	12,300 <sup>r</sup>	100,000	99,800	12,600	1,110,000	1,130,000
Sweated pig	198	790	790	198	9,570	9,570
Total all classes	45,900 <sup>r</sup>	262,000	263,000	44,700	3,170,000	3,190,000

Revised.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes revised data from previous month(s).

<sup>&</sup>lt;sup>3</sup>Includes data on imported aluminum-base scrap.

TABLE 5 ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES FOR  $2006^{1,2}\,$ 

		Decen	nber		January-December <sup>3</sup>	
	Stocks,		Net	Stocks,		Net
	opening	Production	shipments	closing	Production	shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,690 <sup>r</sup>	1,240	1,420	2,510	16,800	17,100
380 and variations	3,060 <sup>r</sup>	13,200	13,100	3,170	191,000	193,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,160	1,700	1,680	1,190	20,600	20,400
No. 319 and variations	2,030 <sup>r</sup>	3,930	4,170	1,790	65,600	65,400
F-132 alloy and variations	490 <sup>r</sup>	696	696	487	18,700	19,200
Al-Zn alloys	332	168	193	306	2,510	2,500
Al-Si alloys (0.6% to 2.0% Cu)	41	24	24	41	289	289
Al-Cu alloys (1.5% Si, max.)	283	411	411	283	4,940	4,940
Other <sup>4</sup>	4,580	8,000	8,390	4,190	96,100	97,200
Wrought alloys:						
Extrusion billets	10,200 <sup>r</sup>	17,700	17,500	10,300	234,000	234,000
Total all alloys	24,800 <sup>r</sup>	47,100	47,600	24,300	651,000	654,000
Less:						
Primary aluminum consumed	XX	8,390	XX	XX	118,000	XX
Primary silicon consumed	XX	2,070	XX	XX	32,100	XX
Other alloying ingredients consumed	XX	933	XX	XX	10,700	XX
Net metallic recovery from aluminum						
scrap and sweated pig consumed in						
production of secondary aluminum						
ingot <sup>5</sup>	XX	35,700	XX	XX	490,000	XX

<sup>&</sup>lt;sup>r</sup>Revised. XX Not applicable.

<sup>&</sup>lt;sup>1</sup>Excludes integrated aluminum companies.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Includes revised data from previous months.

<sup>&</sup>lt;sup>4</sup>Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

<sup>&</sup>lt;sup>5</sup>No allowance made for melt-loss of primary aluminum and alloying ingredients.

 $\label{eq:table 6} \text{U.s. IMPORTS FOR CONSUMPTION OF ALUMINUM IN NOVEMBER 2006}^1$ 

	Metals and a	illoys, crude	Plates, sheet	ts, bars, etc.	Sci	rap	Total	
		January-		January-		January-		January-
Country	November	November	November	November	November	November	November	November
Argentina	1,000	52,100	13	129			1,010	52,200
Australia	6,300	57,800	15	162	982	2,210	7,300	60,100
Bahrain	3,980	73,700	2,040	13,100			6,010	86,800
Belgium		197	891	6,970		122	891	7,290
Brazil	7,590	123,000	4,390	31,000		634	12,000	154,000
Canada	153,000	1,800,000	37,300	485,000	35,500	326,000	226,000	2,610,000
China	7,370	59,300	13,300	149,000		5	20,700	208,000
France	18	655	349	4,370		74	367	5,100
Germany	422	5,300	10,300	116,000	99	370	10,800	121,000
Hungary			15	2,820			15	2,820
Italy	46	203	537	2,740		(2)	583	2,940
Japan	18	559	931	14,300	51	745	1,000	15,600
Korea, Republic of	101	354	163	2,800		195	265	3,350
Mexico	891	2,800	1,610	19,300	7,820	108,000	10,400	130,000
Netherlands	55	699	157	2,040	10	112	221	2,850
Norway	63	300	51	295			125	595
Russia	23,500	613,000	4,560	45,800	122	5,750	28,200	664,000
South Africa	3,140	74,300	3,780	48,600			6,920	123,000
Spain		140	45	1,190			45	1,330
Sweden		3,170	206	4,330		31	206	7,530
Switzerland		1,100	531	5,530			531	6,630
Tajikistan		25,700						25,700
United Arab Emirates	9,390	94,300		3	167	1,650	9,560	95,900
United Kingdom	341	32,300	367	5,430	116	1,580	823	39,300
Venezuela	10,800	132,000	2,940	16,800	285	2,650	14,100	151,000
Other	5,130	43,700	14,100	150,000	4,480	40,000	23,700	234,000
Total	233,000	3,200,000	98,600	1,130,000	49,600	490,000	382,000	4,810,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

 $\label{eq:table 7} \text{U.S. EXPORTS OF ALUMINUM IN NOVEMBER 2006}^1$ 

	Metals and	alloys, crude	Plates, sheet	ts, bars, etc.	Scı	ap	Total	
	-	January-		January-		January-		January-
Country or territory	November	November	November	November	November	November	November	November
Australia	22	302	151	1,620	2	43	175	1,970
Belgium	220	1,420	328	6,140		309	549	7,870
Brazil		122	1,110	6,640	43	334	1,160	7,100
Canada	8,690	112,000	36,600	450,000	11,000	137,000	56,300	698,000
China	49	2,500	2,890	34,500	57,300	837,000	60,200	874,000
Czech Republic		(2)	5	133			5	133
Dominican Republic		86	74	351		40	74	477
France	13	83	1,260	12,500		22	1,270	12,600
Germany	56	504	784	9,300	4	268	844	10,100
Hong Kong		1,080	986	10,400	2,930	22,100	3,910	33,600
India	24	280	50	599	620	7,640	694	8,520
Israel	27	999	549	3,860			576	4,860
Italy	256	746	230	4,480		728	487	5,950
Japan	661	9,170	1,230	18,000	3,040	39,600	4,930	66,800
Korea, Republic of	24	711	863	12,700	15,300	139,000	16,200	152,000
Malaysia		43	254	4,020	283	2,440	538	6,500
Mexico	15,100	181,000	20,900	243,000	6,320	92,600	42,300	517,000
Netherlands	(2)	108	40	713	25	312	66	1,130
Russia	597	1,140	21	173	5	24	624	1,340
Saudi Arabia		22	2,190	27,800		(2)	2,190	27,800
Singapore	17	157	172	1,830	83	139	273	2,130
Spain	2	34	94	1,160		7	97	1,200
Sweden		1	5	162			5	162
Taiwan	17	312	786	8,920	4,320	51,500	5,120	60,700
Thailand	6	1,450	493	6,450	1,080	12,500	1,580	20,400
Ukraine		6		18				24
United Kingdom	59	431	1,280	17,000	80	555	1,420	18,000
Venezuela	2	24	233	2,150		1	236	2,170
Other	1,190	9,630	4,160	40,300	1,580	33,800	6,930	83,700
Total	27,000	324,000	77,700	925,000	104,000	1,380,000	209,000	2,630,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

 $<sup>^2</sup> Less than \frac{1}{2}$  unit.